

RAW SEQUENCE LISTING

EFS

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Application Serial Number: 10/580,709
Source: 1 Fwd
Date Processed by STIC: 3/2/07

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RAW SEQUENCE LISTING

DATE: 03/02/2007

PATENT APPLICATION: US/10/580,709

TIME: 12:58:55

Input Set : N:\efs\03_02_07\10580709_efs\SubstituteSequenceListing.txt

Output Set: N:\CRF4\03022007\J580709.raw

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3 <110> APPLICANT: Vermeij, Paul
5 <120> TITLE OF INVENTION: Lawsonia intracellularis 26 kD subunit vaccine
7 <130> FILE REFERENCE: I-2003.023 US
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/580,709
C--> 10 <141> CURRENT FILING DATE: 2006-05-25
12 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/053342
13 <151> PRIOR FILING DATE: 2004-12-08
15 <160> NUMBER OF SEQ ID NOS: 2
17 <170> SOFTWARE: PatentIn version 3.3
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 856
21 <212> TYPE: DNA
22 <213> ORGANISM: Lawsonia intracellularis
25 <220> FEATURE:
26 <221> NAME/KEY: CDS
27 <222> LOCATION: (80)..(823)
29 <400> SEQUENCE: 1
30 atggctataa gcgattgaat aacagaaaat aacacctatg cctgaaattt tcgacgcgtc      60
32 gaaattttta gaggaacc atg aaa aaa cta ctc ctt ttg tta tct att ctg      112
33           Met Lys Lys Leu Leu Leu Leu Leu Ser Ile Leu
34           1           5           10
36 ttt cta acc cca agt att acc ttg gcg gaa ggt aat act ttc aat gat      160
37 Phe Leu Thr Pro Ser Ile Thr Leu Ala Glu Gly Asn Thr Phe Asn Asp
38           15           20           25
40 agt ttc aac aag gct aag cgc ata ctg caa gat gag gtg tat tac gac      208
41 Ser Phe Asn Lys Ala Lys Arg Ile Leu Gln Asp Glu Val Tyr Tyr Asp
42           30           35           40
44 cac caa gtt aca cta tac tgc gga tat gaa tat gat gac caa aaa agg      256
45 His Gln Val Thr Leu Tyr Cys Gly Tyr Glu Tyr Asp Asp Gln Lys Arg
46           45           50           55
48 ata tgt ctc cct gat gga ttt ata gca gag aaa cat caa aaa aga tca      304
49 Ile Cys Leu Pro Asp Gly Phe Ile Ala Glu Lys His Gln Lys Arg Ser
50 60           65           70           75
52 tat aaa att gag tgg gaa cat agt gtg cct gct gag aat ttt ggc aga      352
53 Tyr Lys Ile Glu Trp Glu His Ser Val Pro Ala Glu Asn Phe Gly Arg
54           80           85           90
56 gct ttt act gaa tgg cgc gaa ggt cat cct ctt tgt gta gat aat aaa      400
57 Ala Phe Thr Glu Trp Arg Glu Gly His Pro Leu Cys Val Asp Asn Lys
58           95           100          105
60 ggt aaa agt ttc aaa gga cga aaa tgt gca gaa aaa gta aat aaa aca      448
61 Gly Lys Ser Phe Lys Gly Arg Lys Cys Ala Glu Lys Val Asn Lys Thr
62           110          115          120
64 tat aga tat atg cag tct gat atg tac aat ttg ttt cca gca gtc ggg      496

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65 Tyr Arg Tyr Met Gln Ser Asp Met Tyr Asn Leu Phe Pro Ala Val Gly
66      125                      130                      135
68 tct gtc aat gct gcg aga agc aat aag caa tac tca gag tta ctt gga      544
69 Ser Val Asn Ala Ala Arg Ser Asn Lys Gln Tyr Ser Glu Leu Leu Gly
70 140                      145                      150                      155
72 gtt caa tct gct ttt gga acg tgt gag gca aaa ata gat ggg aat aga      592
73 Val Gln Ser Ala Phe Gly Thr Cys Glu Ala Lys Ile Asp Gly Asn Arg
74      160                      165                      170
76 ttc gaa cca ccg gat aga gct aaa ggt caa gta gcc cgt gct gct ctt      640
77 Phe Glu Pro Pro Asp Arg Ala Lys Gly Gln Val Ala Arg Ala Ala Leu
78      175                      180                      185
80 tat atg gat aaa gag tac aag gaa tac aat cta agt cgt cag caa aga      688
81 Tyr Met Asp Lys Glu Tyr Lys Glu Tyr Asn Leu Ser Arg Gln Gln Arg
82      190                      195                      200
84 aga ctt ttt gag gct tgg agt aat atg tat cca gtc gat gaa tgg gag      736
85 Arg Leu Phe Glu Ala Trp Ser Asn Met Tyr Pro Val Asp Glu Trp Glu
86      205                      210                      215
88 tgt aca cga gcc aaa cga atc gaa tct ata cag gga aat gaa aat att      784
89 Cys Thr Arg Ala Lys Arg Ile Glu Ser Ile Gln Gly Asn Glu Asn Ile
90 220                      225                      230                      235
92 ttt gta aaa aat atg tgt atc gaa aag ggg tta tgg taa acaaacgagg      833
93 Phe Val Lys Asn Met Cys Ile Glu Lys Gly Leu Trp
94      240                      245
96 acaatataaaa tactacctaa gta      856
99 <210> SEQ ID NO: 2
100 <211> LENGTH: 247
101 <212> TYPE: PRT
102 <213> ORGANISM: Lawsonia intracellularis
104 <400> SEQUENCE: 2
106 Met Lys Lys Leu Leu Leu Leu Leu Ser Ile Leu Phe Leu Thr Pro Ser
107 1      5      10      15
110 Ile Thr Leu Ala Glu Gly Asn Thr Phe Asn Asp Ser Phe Asn Lys Ala
111      20      25      30
114 Lys Arg Ile Leu Gln Asp Glu Val Tyr Tyr Asp His Gln Val Thr Leu
115      35      40      45
118 Tyr Cys Gly Tyr Glu Tyr Asp Asp Gln Lys Arg Ile Cys Leu Pro Asp
119      50      55      60
122 Gly Phe Ile Ala Glu Lys His Gln Lys Arg Ser Tyr Lys Ile Glu Trp
123 65      70      75      80
126 Glu His Ser Val Pro Ala Glu Asn Phe Gly Arg Ala Phe Thr Glu Trp
127      85      90      95
130 Arg Glu Gly His Pro Leu Cys Val Asp Asn Lys Gly Lys Ser Phe Lys
131      100      105      110
134 Gly Arg Lys Cys Ala Glu Lys Val Asn Lys Thr Tyr Arg Tyr Met Gln
135      115      120      125
138 Ser Asp Met Tyr Asn Leu Phe Pro Ala Val Gly Ser Val Asn Ala Ala
139      130      135      140
142 Arg Ser Asn Lys Gln Tyr Ser Glu Leu Leu Gly Val Gln Ser Ala Phe
143 145      150      155      160

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146 Gly Thr Cys Glu Ala Lys Ile Asp Gly Asn Arg Phe Glu Pro Pro Asp
147                               165                               170                               175
150 Arg Ala Lys Gly Gln Val Ala Arg Ala Ala Leu Tyr Met Asp Lys Glu
151                               180                               185                               190
154 Tyr Lys Glu Tyr Asn Leu Ser Arg Gln Gln Arg Arg Leu Phe Glu Ala
155                               195                               200                               205
158 Trp Ser Asn Met Tyr Pro Val Asp Glu Trp Glu Cys Thr Arg Ala Lys
159       210                               215                               220
162 Arg Ile Glu Ser Ile Gln Gly Asn Glu Asn Ile Phe Val Lys Asn Met
163 225                               230                               235                               240
166 Cys Ile Glu Lys Gly Leu Trp
167                               245

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/580,709

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Input Set : N:\efs\03_02_07\10580709_efs\SubstituteSequenceListing.txt

Output Set: N:\CRF4\03022007\J580709.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date